

# H2Teesside Project

Planning Inspectorate Reference: EN070009

Land within the boroughs of Redcar and Cleveland and Stockton-on-Tees, Teesside and within the borough of Hartlepool, County Durham

The H2 Teesside Order

Document Reference: 8.14 Interrelation Report

Planning Act 2008



**Applicant: H2 Teesside Ltd**

Date: October 2024

---

## DOCUMENT HISTORY

<b>DOCUMENT REF</b>	8.14		
<b>REVISION</b>	0		
<b>AUTHOR</b>	bp		
<b>SIGNED</b>	EI	<b>DATE</b>	03.10.24
<b>APPROVED BY</b>	Bp		
<b>SIGNED</b>	RN	<b>DATE</b>	03.10.24
<b>DOCUMENT OWNER</b>	bp		

---

## TABLE OF CONTENTS

<b>1.0</b>	<b>INTRODUCTION</b> .....	<b>4</b>
1.1	Introduction .....	4
<b>2.0</b>	<b>EXTENT OF THE MAIN SITE ORDER LIMITS</b> .....	<b>6</b>
2.1	Introduction .....	6
2.2	H2T Phase 1 .....	6
2.3	Phase 2 .....	6
<b>3.0</b>	<b>NEARBY NATIONALLY SIGNIFICANT INFRASTRUCTURE PROJECTS AND MAJOR DEVELOPMENTS</b> .....	<b>8</b>
3.1	Introduction .....	8
3.2	Net Zero Teesside Power and Northern Endurance Partnership (NZT/NEP) .....	8
3.3	HyGreen .....	9
<b>4.0</b>	<b>SCHEDULE OF WORKS</b> .....	<b>10</b>

## TABLES

Table 4-1: Indicative Construction Timetable .....	11
--	----

## FIGURES

No table of figures entries found.

## APPENDICES

APPENDIX 1: INTERACTION BETWEEN THE MAIN SITE AND HYGREEN

APPENDIX 2: INTERACTION BETWEEN THE MAIN SITE AND NZT / NEP ORDER LIMITS

---

## 1.0 INTRODUCTION

### 1.1 Introduction

- 1.1.1 The Examining Authority have requested the Applicant to produce an 'Interrelation Report' explaining the overlaps between the Proposed Development and other Nationally Significant Infrastructure Projects and 'Major Development(s)' within the vicinity, including Net Zero Teesside and HyGreen.
- 1.1.2 This note focusses on the interactions between the Main Site of the Proposed Development and those of the HyGreen, NZT Power and NEP developments with a view to providing the rationale behind the Order Limits and how they interact with the above developments, as these were the focus of discussions at ISH1.
- 1.1.3 The note is to demonstrate how the proposed development seeks to minimise its impact on these other developments and show the overlap of work with other schemes. Plans showing how the Proposed Development interacts with HyGreen, NZT Power and NEP are provided in Appendix 1 and 2 of this document respectively. A plan showing how the Proposed Development interacts with these projects, and the projects referred to below, has been produced in response to the Examining Authority's First Written Question ('ExQ1') 1.6.64 and is appended to the Applicant's response to that question also submitted at Deadline 2 (Document reference 8.11.6 'Applicant's response to ExQ1 Compulsory Acquisition and Temporary Possession').
- 1.1.4 In addition, to assist the Examining Authority, a schedule of works, along with estimates of timings as to when those works will be undertaken, and if any overlap with other works is anticipated, is also included.
- 1.1.5 In respect of the wider Order limits, the Applicant notes the following matters:
- where the Order limits interact with the Lighthouse Green Fuels project, the Proposed Development hopes to be a supplier to that project, and the routing of the hydrogen pipeline to their development on their land will be agreed with them pursuant to Protective Provisions;
  - in respect of the York Potash project, there are shared corridors. These are dealt with in the response to ISH1-AP1, and will be developed in close discussion with Anglo American, pursuant to their Protective Provisions;
  - there are interactions with the Teesside Flexible Regas Port project, which is located on Navigator Terminals' land. This project is at an early stage but it is understood that their construction timescales will fall after the Proposed Development and their design work will be able to account for the Proposed Development. The Applicant has been and will continue to liaise with the developers of this project; and`
  - the Applicant is in discussions with H2 NorthEast Limited in respect of the overlaps between the Proposed Development and their project and is confident that a Co-operation Agreement can be agreed between the parties.

- 
- 1.1.6 In light of the points made in this note, its answers to the ExA's FWQs and its response to ISH1-AP1, the Applicant considers it has demonstrated the need for the extent of the Order limits in the context of the wider development in and around Teesworks. In developing the Proposed Development, the Applicant has been cognisant of South Tees Group's plans for the wider area and considers that, working in partnership with them (as secured through the DCO - through both STG's Protective Provisions and their role in the approval of Requirements), the Proposed Development will be able to be brought forward in a way which ensures that the economic development opportunities of the Teesworks site sought by the South Tees Group are able to be delivered.

---

## 2.0 EXTENT OF THE MAIN SITE ORDER LIMITS

### 2.1 Introduction

2.1.1 The Main Site of the Proposed Development is planned to be built in two phases each with an installed production capacity of 600 MWth LHV “blue” (or otherwise known as “CCS-enabled”) hydrogen generation. There is envisaged to be some sharing of infrastructure between the two phases of the Proposed Development, however, the extent of this is limited due to the necessity of ensuring sufficient plant reliability and availability and, consequently, resilience of hydrogen supply.

### 2.2 H2T Phase 1

2.2.1 Phase 1 of the Main Site of the Proposed Development is planned to be constructed on the southeast corner of the land known as “Foundry”. The Applicant is currently performing Front End Engineering Design of the Hydrogen Production Facility with its appointed FEED contractor for the Main Site.

2.2.2 It is the Applicant’s understanding that all necessary demolition (including surface and subsurface) works have been completed in this corner of the Main Site by the South Tees Group and remediation works are planned to be completed prior to start of the construction works on the Main Site.

2.2.3 The Applicant has also performed a number of Ground Investigations to inform the design development of the Main Site.

### 2.3 H2T Phase 2

2.3.1 The final location of the Phase 2 of the Main Site of the Proposed Development is not yet determined. The main reasons for this are listed below.

- Demolition and remediation works – the demolition works on the Main Site outside of the southeast corner is yet to be completed. It is the Applicant’s understanding that surface demolition works has largely been completed, save for the remainder of the core of the former Blast Furnace on the northeast corner of the Main Site, which is understood to represent an industry-first demolition activity. Subsurface demolition works, however, are yet to be completed in all parts of the Main Site save for the southeast corner.
- Lack of Ground Investigation data – The Applicant, following completion of the demolition works, will be performing a Ground Investigation to inform the design and exact location of the Phase 2 of the Main Site.
- Separation Distances between Phase 1 facilities and Phase 2 facilities of the Main Site – the Applicant is currently undertaking its design development of the Main Site, and the design development work will inform these separation distances in line with the applicable legislations, regulations, national and international design standards.

- 
- Physical overlap with the Main Site of the HyGreen proposed development – the project has been working with the HyGreen project to optimise layout subject to development timetables.
- 2.3.2 Owing to the uncertainties above, the Applicant needs to retain a level of flexibility for where the Phase 2 of the Main Site will be sited as outlined in the relevant Works Plans [APP-010].
- 2.3.3 The Applicant can confirm that continues to engage with the South Tees Group to agree voluntary land agreements for the Proposed Development in the context of these dynamics, and the matters discussed in section 3 below.

---

## 3.0 NEARBY NATIONALLY SIGNIFICANT INFRASTRUCTURE PROJECTS AND MAJOR DEVELOPMENTS

### 3.1 Introduction

3.1.1 This section of the document details the NSIPs and Major Developments that are proposed to be developed in the vicinity of the Main Site of the Proposed Development along with the envisaged interaction between these NSIPs or Major Developments and the Proposed Development.

### 3.2 Net Zero Teesside Power and Northern Endurance Partnership (NZE/NEP)

3.2.1 NZE/NEP is a full chain Carbon Capture, Usage and Storage project comprising a number of elements including a new gas-fired electricity generating station (with an electrical output of up to 860 megawatts) with post combustion carbon capture plant; gas, electricity and water connections (for the electricity generating station); a carbon dioxide (CO<sub>2</sub>) pipeline network (a 'gathering network') for gathering CO<sub>2</sub> from a cluster of local industries on Teesside; a high pressure CO<sub>2</sub> compressor station and an offshore CO<sub>2</sub> export pipeline.

3.2.2 H2Teesside and NZE/NEP are both part of the East Coast Cluster.

3.2.3 The Proposed Development and NZE Power and NEP will have several interconnections between these projects. Namely, these are 1) CO<sub>2</sub> export connection to NEP from H2Teesside, 2) natural gas import connection from NZE Power to H2Teesside, 3) potential water import and export connection between H2Teesside and NZE Power, 4) potential power import connection from NZE Power to H2Teesside. It should be noted that all of these connections are subject to final technical and commercial agreements between the parties.

3.2.4 It should be noted that at the time of the submission of the Applicant's DCO application, the entirety of the Main Site of NZE Power and NEP was included due to uncertainties in terms of final termination locations and routings of these connections. As a result of ongoing design work by both the Applicant and the NZE Power and NEP projects, the Applicant has been able to submit a Change Notification [PDA-019] and is currently consulting on reduced Order Limits in this area for the various interconnections listed above.

3.2.5 The Main Sites of the Proposed Development and NZE Power and NEP will be independent and separate facilities. In other words, the Main Site of the Proposed Development will be fenced and separate from these neighbouring facilities.

3.2.6 It is likely that both the Applicant and NZE Power and NEP projects will need to undertake simultaneous construction activities. It is envisaged that this temporal overlap will be covered by agreeing appropriate Protective Provisions between the parties.



---

### 3.3 HyGreen

- 3.3.1 HyGreen is a “green” (or otherwise known as “electrolytic”) hydrogen project, that is being developed separately and independently of the Applicant, but by the Applicant’s parent company group, bp.
- 3.3.2 The Applicant is aware that the main site of HyGreen’s proposed hydrogen development overlaps with parts of the Main Site of the Applicant. The Applicant and HyGreen are in ongoing discussions regarding this site boundary overlap and how to optimise the respective project layouts.
- 3.3.3 This overlap land is one of the Applicant’s preferred sites for Work No. 1A.2 of the draft DCO [APP-010], with the other being to the north of Phase 1. The final decision on the exact location of Work No. 1A.2 is subject to the Applicant confirming: favourable ground investigation results; satisfactory completion of demolition and remediation works; and compliance with applicable legislation, regulations, national and international design standards with regards to separation distances. This work will not be completed prior to the end of the Examination.
- 3.3.4 It is also the Applicant’s understanding that HyGreen has applied for Hydrogen Allocation Round 2 (HAR2) funding and the timing and location of the HyGreen proposed development will be subject to HAR2 results which could then consequentially affect the location of Phase 2.

---

## 4.0 SCHEDULE OF WORKS

- 4.1.1 The Applicant currently anticipate construction of Phase 1 of the Proposed Development to commence Q4 2025, subject to successful completion of design work, securing all required consents and Final Investment Decision.
- 4.1.2 As such there could be up to a 4 year overlap of construction activity between H2T Phase 1 and NZT/NEP (based on publicly available schedules<sup>1</sup> and both projects taking positive Final Investment Decisions).
- 4.1.3 H2T Phase 2 construction activities are envisaged to start on the completion of H2T Phase 1 construction (currently anticipated to be around 2H 2028).
- 4.1.4 Subject to the progression of the HyGreen project in 2025, it is anticipated there could be an estimated up to 4 year overlap of H2T and HyGreen construction activity<sup>2</sup>.
- 4.1.5 Appendix 23E of the ES (APP-224) considers the impacts of these overlaps in detail.

---

<sup>1</sup> NZT/NEP Document Reference: 9.47 – Sensitivity Assessment of Construction Programme  
[https://infrastructure.planninginspectorate.gov.uk/wp-content/ipc/uploads/projects/EN010103/EN010103-002422-NZT%20DCO%209.47%20-%20Sensitivity%20Assessment%20of%20Construction%20Programme%20-%20Oct%202022%20\(D11\).pdf](https://infrastructure.planninginspectorate.gov.uk/wp-content/ipc/uploads/projects/EN010103/EN010103-002422-NZT%20DCO%209.47%20-%20Sensitivity%20Assessment%20of%20Construction%20Programme%20-%20Oct%202022%20(D11).pdf)

<sup>2</sup> HyGreen planning application ES Chapter 5 Construction Programme and Management  
[https://planning.redcar-](https://planning.redcar-cleveland.gov.uk/Document/Download?module=PLA&recordNumber=83855&planId=678123&imageId=14&isPlan=False&fileName=HyGreen%20ES%20Report%20Chapter%205%20CONSTRUCTION%20-%20FINAL.pdf)

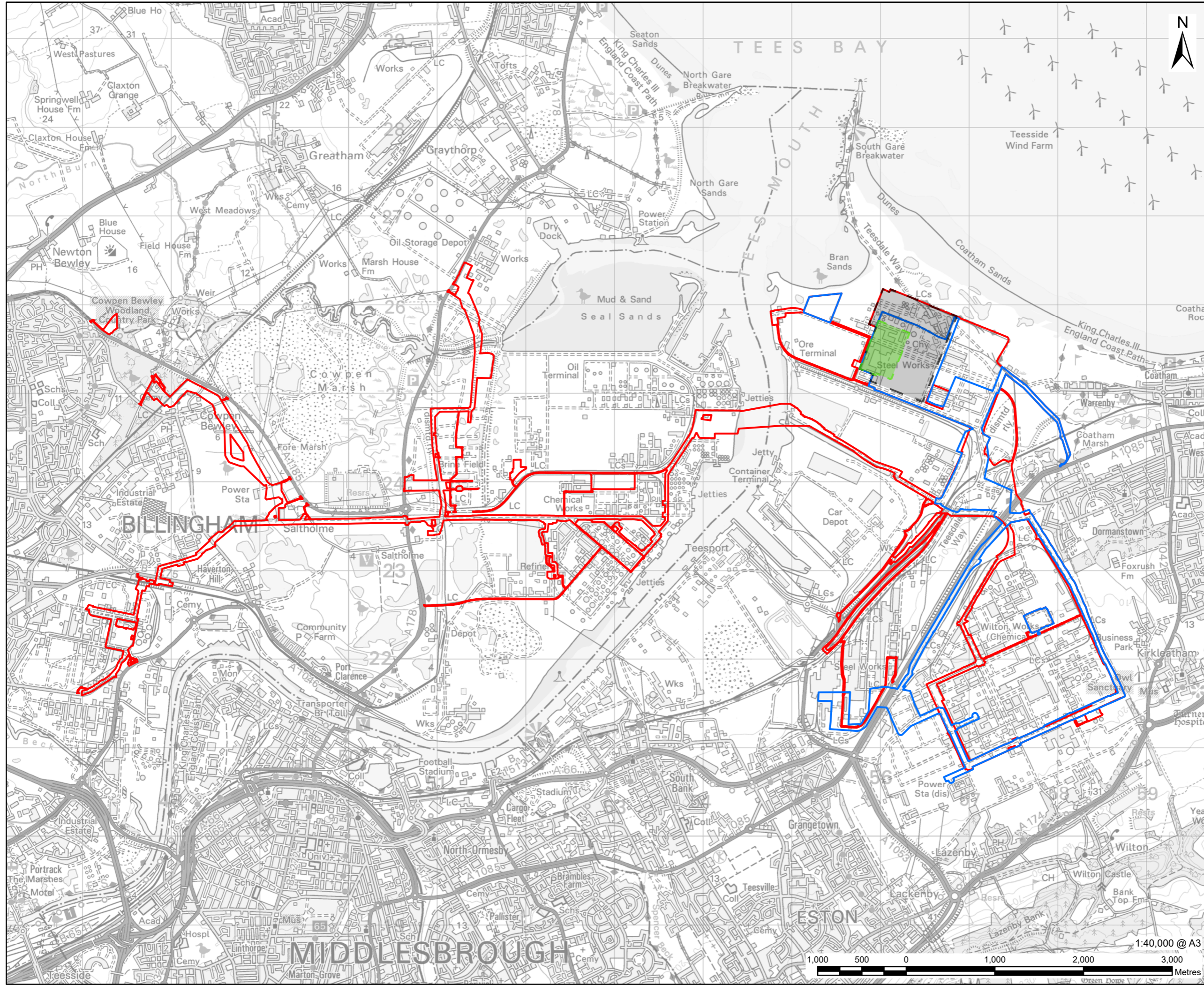
[cleveland.gov.uk/Document/Download?module=PLA&recordNumber=83855&planId=678123&imageId=14&isPlan=False&fileN](https://planning.redcar-cleveland.gov.uk/Document/Download?module=PLA&recordNumber=83855&planId=678123&imageId=14&isPlan=False&fileName=HyGreen%20ES%20Report%20Chapter%205%20CONSTRUCTION%20-%20FINAL.pdf)  
[ame=HyGreen%20ES%20Report%20Chapter%205%20CONSTRUCTION%20-%20FINAL.pdf](https://planning.redcar-cleveland.gov.uk/Document/Download?module=PLA&recordNumber=83855&planId=678123&imageId=14&isPlan=False&fileName=HyGreen%20ES%20Report%20Chapter%205%20CONSTRUCTION%20-%20FINAL.pdf)

**Table 4-1: Indicative Construction Timetable**

YEAR	2024	2025	2026	2027	2028	2029	2030
H2Teesside							
HyGreen (estimated)							
NZT (estimated)							

---

## APPENDIX 1: INTERACTION BETWEEN THE MAIN SITE AND HYGREEN



**PROJECT**  
H2 Teesside DCO

**CLIENT**  
H2 Teesside Limited

**CONSULTANT**  
AECOM Limited  
100 Embankment,  
Cathedral Approach,  
Manchester, M3 7FB  
www.aecom.com

- LEGEND**
- H2 Teesside Proposed Development Site
  - HyGreen Proposed Development Site
  - HyGreen Main Site
  - H2 Teesside Main Site

**NOTES**  
1: Reproduced from Ordnance Survey digital map data © Crown copyright 2024. All rights reserved. License number 0100031673.

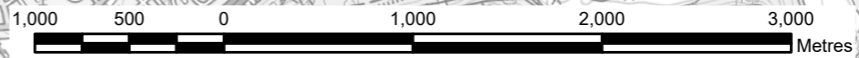
**ISSUE PURPOSE**  
Interrelation Report

**PROJECT NUMBER**  
60689030

**FIGURE TITLE**  
H2 Teesside – HyGreen Order Limits Overlap

**FIGURE NUMBER**  
Figure 1

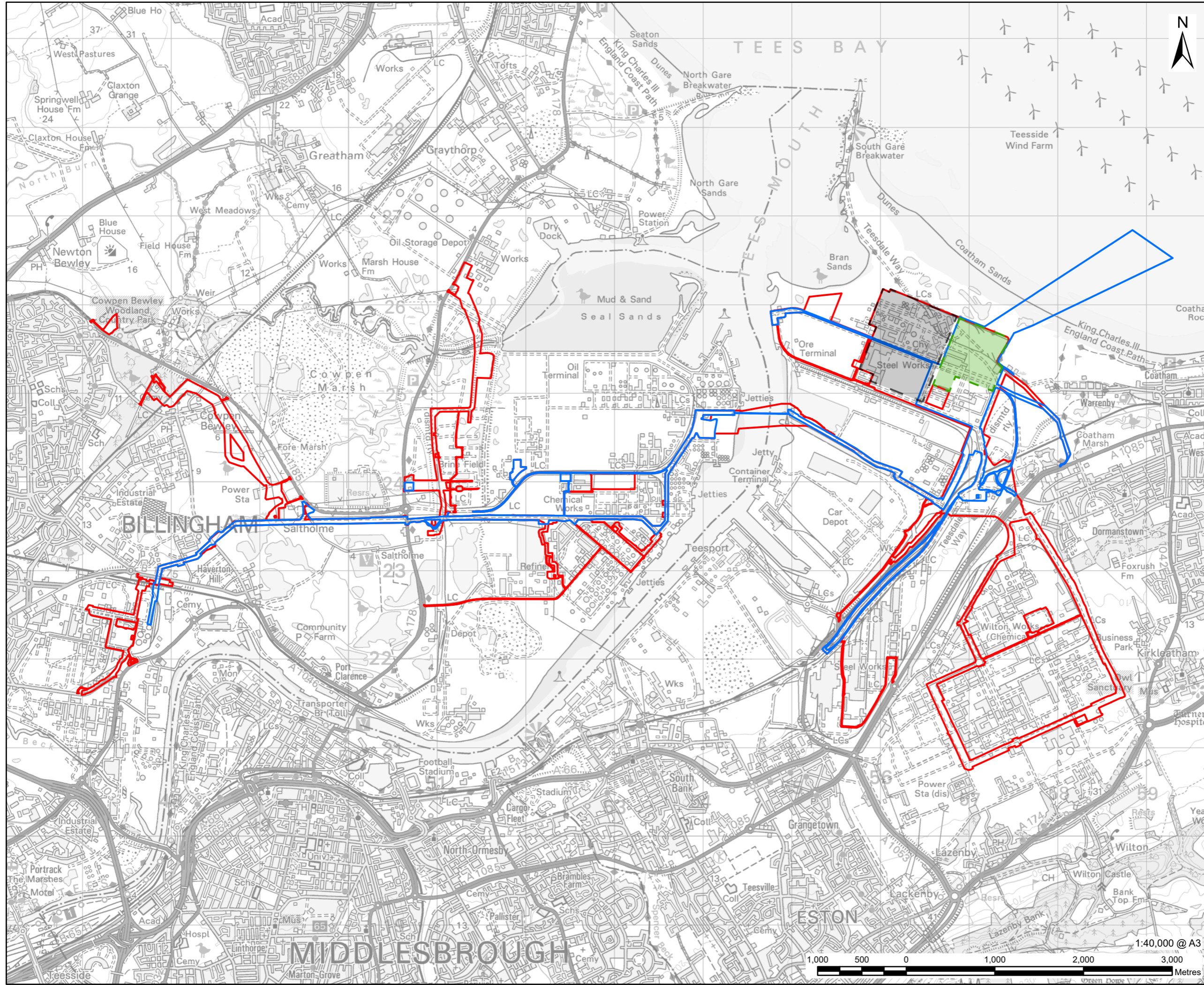
1:40,000 @ A3



This drawing has been prepared for the use of AECOM's client. It may not be used, modified, reproduced or relied upon by third parties, except as agreed by law. AECOM accepts no responsibility, and denies any liability whatsoever, to any party that uses or relies on this drawing without AECOM's express written consent. Do not scale this document. All measurements must be obtained from the stated dimensions.

---

## APPENDIX 2: INTERACTION BETWEEN THE MAIN SITE AND NZT / NEP ORDER LIMITS



**PROJECT**  
H2 Teesside DCO

**CLIENT**  
H2 Teesside Limited

**CONSULTANT**  
AECOM Limited  
100 Embankment,  
Cathedral Approach,  
Manchester, M3 7FB  
www.aecom.com

- LEGEND**
- H2 Teesside Proposed Development Site
  - NZT/NEP Proposed Development Site
  - NZT/NEP Main Site
  - H2 Teesside Main Site

**NOTES**  
1: Reproduced from Ordnance Survey digital map data © Crown copyright 2024. All rights reserved. License number 0100031673.

**ISSUE PURPOSE**  
Interrelation Report

**PROJECT NUMBER**  
60689030

**FIGURE TITLE**  
H2 Teesside – NZT/NEP Order Limits Overlap

**FIGURE NUMBER**  
Figure 2

This drawing has been prepared for the use of AECOM's client. It may not be used, modified, reproduced or relied upon by third parties, except as agreed by law. AECOM accepts no responsibility, and denies any liability whatsoever, to any party that uses or relies on this drawing without AECOM's express written consent. Do not scale this document. All measurements must be obtained from the stated dimensions.